

General

Title

Breast cancer: the proportion of patients with N+ or N- T > 1 cm HER2+ (IHC 3+ or FISH+) invasive carcinoma treated with chemotherapy and who had adjuvant trastuzumab.

Source(s)

Del Turco MR, Ponti A, Bick U, Biganzoli L, Cserni G, Cutuli B, Decker T, Dietel M, Gentilini O, Kuehn T, Mano MP, Mantellini P, Marotti L, Poortmans P, Rank F, Roe H, Scaffidi E, van der Hage JA, Viale G, Wells C, Welnicka-Jaskiewicz M, Wengstom Y, Cataliotti L. Quality indicators in breast cancer care. *Eur J Cancer*. 2010 Sep;46(13):2344-56. [PubMed](#)

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the proportion of patients with N+ or N- T > 1 cm human epidermal growth factor receptor 2 positive (HER2+) (immunohistochemistry [IHC] 3+ or fluorescence in situ hybridisation positive [FISH+]) invasive carcinoma treated with chemotherapy and who had adjuvant trastuzumab.

Rationale

Since 1990, in the United States and many European countries, breast cancer mortality is decreasing by 1% to 2% per year, thanks to early detection and improved treatment. However, it has been reported that there were still wide differences in treatment offered to patients with breast cancer in terms of mastectomy and radiotherapy rates and use of adjuvant chemotherapy and hormone therapy. It has also been shown that the specialised breast cancer care was associated with a significant reduction in

mortality. Breast cancer care is complex, onerous and expensive; therefore, quality measurements are essential to monitor effectiveness and to guide improvements in healthcare.

Evidence for Rationale

Cataliotti L, Costa A, Daly PA, Fallowfield L, Freilich G, Holmberg L, Piccart M, van de Velde CJ, Veronesi U. Florence statement on breast cancer, 1998 forging the way ahead for more research on and better care in breast cancer. *Eur J Cancer*. 1999 Jan;35(1):14-5. [0 references] [PubMed](#)

Del Turco MR, Ponti A, Bick U, Biganzoli L, Cserni G, Cutuli B, Decker T, Dietel M, Gentilini O, Kuehn T, Mano MP, Mantellini P, Marotti L, Poortmans P, Rank F, Roe H, Scaffidi E, van der Hage JA, Viale G, Wells C, Welnicka-Jaskiewicz M, Wengstom Y, Cataliotti L. Quality indicators in breast cancer care. *Eur J Cancer*. 2010 Sep;46(13):2344-56. [PubMed](#)

Gillis CR, Hole DJ. Survival outcome of care by specialist surgeons in breast cancer: a study of 3786 patients in the west of Scotland. *BMJ*. 1996 Jan 20;312(7024):145-8. [PubMed](#)

Grilli R, Minozzi S, Tinazzi A, Labianca R, Sheldon TA, Liberati A. Do specialists do it better? The impact of specialization on the processes and outcomes of care for cancer patients. *Ann Oncol*. 1998 Apr;9(4):365-74. [61 references] [PubMed](#)

Sainsbury R, Rider L, Smith A, MacAdam A. Does it matter where you live? Treatment variation for breast cancer in Yorkshire. The Yorkshire Breast Cancer Group. *Br J Cancer*. 1995 Jun;71(6):1275-8. [PubMed](#)

Schachter HM, Mamaladze V, Lewin G, Graham ID, Brouwers M, Sampson M, Morrison A, Zhang L, O'Brien P, Garrity C. Many quality measurements, but few quality measures assessing the quality of breast cancer care in women: a systematic review. *BMC Cancer*. 2006;6:291. [28 references] [PubMed](#)

Vulto JC, Louwman WJ, Poortmans PM, Lybeert LM, Rutten HJ, Coebergh JW. A population based study of radiotherapy in a cohort of patients with breast cancer diagnosed between 1996 and 2000. *Eur J Cancer*. 2007 Sep;43(13):1976-82. [PubMed](#)

Primary Health Components

Breast cancer; human epidermal growth factor receptor 2 positive (HER2+) (immunohistochemistry [IHC] 3+ or fluorescence in situ hybridisation positive [FISH+]) invasive carcinoma; chemotherapy; adjuvant trastuzumab

Denominator Description

Number of patients with a diagnosis of N+ or N- T > 1 cm HER2+ (IHC 3+ or FISH+) invasive carcinoma treated with chemotherapy (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Number of patients with a diagnosis of N+ or N- T > 1 cm HER2+ (IHC 3+ or FISH+) invasive carcinoma treated with chemotherapy and who had adjuvant trastuzumab

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

- *Motivation*: Trastuzumab should be offered to patients with HER2+ (IHC 3+ or fluorescence in situ hybridization [FISH]+) invasive breast cancer N+ or N- T > 1 cm if they receive adjuvant chemotherapy. It is recommended to follow the American Society of Clinical Oncology (ASCO) guidelines for HER2 testing.
- *Level of evidence*: I*. Clinical trials have shown that adjuvant trastuzumab improves relapse-free survival (RFS) and overall survival (OS) in patients with N+ or N- T > 1 cm HER2+ early breast cancer above chemotherapy alone.

*Graded according to the short version of the U.S. Agency for Healthcare Research and Quality (AHRQ) classification. For more information regarding the developer's methodology, refer to the original source document.

Evidence for Additional Information Supporting Need for the Measure

Del Turco MR, Ponti A, Bick U, Biganzoli L, Cserni G, Cutuli B, Decker T, Dietel M, Gentilini O, Kuehn T, Mano MP, Mantellini P, Marotti L, Poortmans P, Rank F, Roe H, Scaffidi E, van der Hage JA, Viale G, Wells C, Welnicka-Jaskiewicz M, Wengstom Y, Cataliotti L. Quality indicators in breast cancer care. *Eur J Cancer*. 2010 Sep;46(13):2344-56. [PubMed](#)

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Ambulatory Procedure/Imaging Center

Hospital Inpatient

Hospital Outpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Single Health Care Delivery or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Unspecified

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Getting Better

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

Unspecified

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Therapeutic Intervention

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

Number of patients with a diagnosis of N+ or N- T > 1 cm HER2+ (IHC 3+ or FISH+)* invasive carcinoma treated with chemotherapy

*Note:

N = node

T = tumour

HER2 = human epidermal growth factor receptor 2

IHC = immunohistochemistry

FISH = fluorescence in situ hybridisation

Exclusions

Unspecified

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Number of patients with a diagnosis of N+ or N- T > 1 cm HER2+ (IHC 3+ or FISH+) invasive carcinoma treated with chemotherapy and who had adjuvant trastuzumab

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Prescriptive Standard

- Minimum standard: 80%
- Target: greater than 90%

Evidence for Prescriptive Standard

Del Turco MR, Ponti A, Bick U, Biganzoli L, Cserni G, Cutuli B, Decker T, Dietel M, Gentilini O, Kuehn T, Mano MP, Mantellini P, Marotti L, Poortmans P, Rank F, Roe H, Scaffidi E, van der Hage JA, Viale G,

Identifying Information

Original Title

13b: Appropriate chemotherapy and other medical therapy.

Measure Collection Name

Quality Indicators in Breast Cancer Care

Submitter

European Society of Breast Cancer Specialists - Clinical Specialty Collaboration

Developer

European Society of Breast Cancer Specialists - Clinical Specialty Collaboration

Funding Source(s)

European Society of Breast Cancer Specialists (EUSOMA)

Composition of the Group that Developed the Measure

M. Rosselli Del Turco (EUSOMA, Florence, Italy); A. Ponti (CPO Piemonte, Turin, Italy); U. Bick (Charité – Universitätsmedizin Berlin, Berlin, Germany); L. Biganzoli (Hospital of Prato, Prato, Italy); G. Cserni (Bacs-Kiskun County Teaching Hospital, Kecskemét, Hungary); B. Cutuli (Policlinique de Courlancy, Reims, France); T. Decker (Dietrich Bonhoefer Clinic, Neubrandenburg, Germany); M. Dietel (Charité – Universitätsmedizin Berlin, Berlin, Germany); O. Gentilini (European Institute of Oncology, Milan, Italy); T. Kuehn (Klinikum Esslingen, Esslingen, DE, Germany); M.P. Mano (AOU San Giovanni Battista, Turin, Italy); P. Mantellini (Istituto per lo Studio e la Prevenzione Oncologica, ISPO, Florence, Italy); L. Marotti (EUSOMA, Florence, Italy); P. Poortmans (Institute Verbeeten, Tilburg, The Netherlands); F. Rank (Rigshospitalet, Copenhagen, Denmark); H. Roe (North Cumbria University Hospitals NHS Trust, Cumbria, United Kingdom); E. Scaffidi (European Institute of Oncology, Milan, Italy); J.A. van der Hage (National Cancer Institute, Amsterdam, The Netherlands); G. Viale (European Institute of Oncology and University of Milan, Milan, Italy); C. Wells (University College London Hospitals, London, United Kingdom); M. Welnicka-Jaskiewicz; (Medical University of Gdansk, Gdansk, Poland); Y. Wengstöm (Karolinska Institutet, Stockholm, Sweden); L. Cataliotti (Careggi University Hospital, Florence, Italy)

Financial Disclosures/Other Potential Conflicts of Interest

None declared.

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2010 Jun

Measure Maintenance

Unspecified

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

The measure developer reaffirmed the currency of this measure in January 2017.

Measure Availability

Source available from the [European Society of Breast Cancer Specialists \(EUSOMA\) Web site](#)

.

For more information, contact M. Rosselli Del Turco at Email: secretariat@eusoma.org; Web site: www.eusoma.org .

NQMC Status

This NQMC summary was completed by ECRI Institute on August 24, 2012. The information was verified by the measure developer on October 4, 2012.

The information was reaffirmed by the measure developer on January 9, 2017.

Copyright Statement

This article was published in the European Journal of Cancer, Vol. 46, Del Turco MR, Ponti A, Bick U, Biganzoli L, Cserni G, Cutuli B, Decker T, Dietel M, Gentilini O, Kuehn T, Mano MP, Mantellini P, Marotti L, Poortmans P, Rank F, Roe H, Scaffidi E, van der Hage JA, Viale G, Wells C, Welnicka-Jaskiewicz M, Wengstom Y, Cataliotti L, Quality indicators in breast cancer care, 2344-56, Copyright Elsevier (2010). This permission is granted for non-exclusive world English rights only. For other languages please reapply separately for each one required. Permission excludes use in a print form. Should you have a specific print project in mind please reapply for permission. Reproduction of this material is confined to the purpose for which permission is hereby given.

Production

Source(s)

Del Turco MR, Ponti A, Bick U, Biganzoli L, Cserni G, Cutuli B, Decker T, Dietel M, Gentilini O, Kuehn T, Mano MP, Mantellini P, Marotti L, Poortmans P, Rank F, Roe H, Scaffidi E, van der Hage JA, Viale G,

Disclaimer

NQMC Disclaimer

The National Quality Measures Clearinghouse[®] (NQMC) does not develop, produce, approve, or endorse the measures represented on this site.

All measures summarized by NQMC and hosted on our site are produced under the auspices of medical specialty societies, relevant professional associations, public and private organizations, other government agencies, health care organizations or plans, individuals, and similar entities.

Measures represented on the NQMC Web site are submitted by measure developers, and are screened solely to determine that they meet the [NQMC Inclusion Criteria](#).

NQMC, AHRQ, and its contractor ECRI Institute make no warranties concerning the content or its reliability and/or validity of the quality measures and related materials represented on this site.

Moreover, the views and opinions of developers or authors of measures represented on this site do not necessarily state or reflect those of NQMC, AHRQ, or its contractor, ECRI Institute, and inclusion or hosting of measures in NQMC may not be used for advertising or commercial endorsement purposes.

Readers with questions regarding measure content are directed to contact the measure developer.